

WHAT IS CLAIMED IS:

1. A stator of a rotary electric machine, comprising:
a stator core having a plurality of slots; and
a poly-phase winding comprising accommodated portions accommodated in the slots to provide at least two pairs of the accommodated portions, each of the pairs including an inner layer and an outer layer with respect to a radial depth of the slots, and turn portions connecting a pair of accommodated portions in the different layers and providing coil ends on opposite sides of the stator core, wherein the poly-phase winding comprises a plurality of phase windings, each phase winding being made of a continuous wire, and the turn portions being arranged side by side with respect to a radial direction on the one side of the stator core.
2. The stator of the rotary electric machine according to claim 1, wherein the turn portions form a surrounding arrangement on one side of the stator core by surrounding one group of turn portions with another group of turn portions.
3. The stator of the rotary electric machine according to claim 1, wherein the turn portions arranged side by side, form a concentric arrangement on one side of the stator core by arranging the turn portions concentrically.
4. The stator of the rotary electric machine according to claim 3, wherein the concentric arrangement is disposed only on the one side of the stator core, and the turn portions form a surrounding arrangement only on another side of the stator core by surrounding one group of turn portions with another group of turn portions.
5. The stator of the rotary electric machine according to claim 1, wherein an even number of the accommodated portions are layered in the slot.
6. The stator of the rotary electric machine according to claim 1, wherein the poly-phase winding is made of wire which has a round cross section.